UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,196	10/30/2000	Shmuel Shaffer	2705-119	9840

20575	7590	12/02/2003	

MARGER JOHNSON & MCCOLLOM PC
1030 SW MORRISON STREET
PORTLAND, OR 97205

EXAMINER
DUONG, OANH L

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 12/02/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/702,196	SHAFFER ET AL.
	Examiner	Art Unit
	Oanh L. Duong	2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/30/2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-62* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

     a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1.   Claims 2 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The feature "them" in claim 2 does not have a clear meaning (e.g., redundant or original data). The feature "a transmitting device...comprises a first device and a second device" in claim 33 is unclear how a single device can comprise two separate devices.

Claim 33 recites the limitation "the connection" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-5, 7-8, 14-16, 24-27, 29, 33-35, 43-47, 49 and 54-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Ekudden et al (Ekudden) (US 2001/0041981 A1).

Regarding claims 1, 24 and 43, Ekudden teaches a method comprising a first

device establishing a connection with a second device through a network according to a

faulty packet network communication protocol (UDP) (e.g., see page 1 paragraph 4);

the first device transmitting to the second device original voice data in original packets

through the connection (e.g., see page 3 paragraph 51); generating redundant data by

replicating the original voice data (e.g., see 2 paragraph 13); and transmitting the

redundant data to the second device (e.g., page 2 paragraph 13).

Regarding claim 33, Ekudden teaches a retransmitting device for use in a

network comprising a first device and a second device and operating according to a

faulty packet network communication protocol (e.g., see fig. 6), comprising a processor

configured to receive from the first device original voice data in an original packet (e.g.,

see page 3 paragraph 51); transmit through the connection to the second device the

original packet (e.g., see page 3 paragraph 51); determine whether a replication flag is

set; and if so, generate redundant data by replicating the original voice data (e.g., see

page 2 paragraphs 27-33), and transmit the redundant data to the second device (e.g.,

see page 2 paragraph 13).

Regarding claims 2 and 44, Ekudden teaches the first device generates the

redundant data (e.g., see page 2 paragraph 13).

Regarding claims 3, 25, 34 and 45, Ekudden teaches the first device transmits at

least some of the redundant data in additional packets distinct from the original packets

(e.g., see page 4 paragraph 56).

Regarding claims 4, 26, 35 and 46, Ekudden teaches the first device imparts at least some of the redundant data in the original packets prior to transmitting them (e.g., see page 1 paragraph 8 and page 4 paragraphs 55-56).

Regarding claims 5, 27 and 47, Ekudden teaches determining whether a replication flag is set, and generating the redundant data only if the replication flag is set (e.g., see page 2 paragraphs 27-33)

Regarding claims 7 and 29, Ekudden teaches securing additional bandwidth (e.g., see page 1 paragraph 11).

Regarding claim 8, Ekudden teaches the first device generates the redundant data (e.g., see page 2 paragraph 13).

Regarding claim 49, Ekudden teaches the first device generates the redundant data (e.g., see page 2 paragraph 13).

Regarding claims 14 and 54, Ekudden teaches a retransmitting device (partial redundancy generator 64) that is part of the connection receiving a next one of the original packets, and wherein if the replication flag is set, the retransmitting device generates next redundant data by replicating next original voice data included in the next original packet, and transmits the next redundant data to the second device (e.g., see page 3 paragraph 51).

Regarding claims 15 and 55, Ekudden teaches the retransmitting device transmits the next redundant data in at least one additional packet distinct from the next original packet (e.g., see page 4 paragraph 56).

Regarding claims 16 and 56, Ekudden teaches the retransmitting device imparts

at least portion of the next redundant data in a second received original packet (e.g.,

see page 1 paragraph 8 and page 4 paragraphs 55-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 6, 10, 17, 30, 36, 48, 51 and 57 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Ekudden in view of Perreault et al (Perreault) (Us 6,169,728

B1).

Regarding claims 6, 30, 36, 48 and 57, Ekudden does not explicitly teach

monitoring an error rate as claimed. However, Perreault teaches monitoring an error

rate of transmitting, and if the error rate of transmitting is higher than a threshold rate,

setting the replication flag (e.g., see col. 6 line 48-col.7 line 32 and col. 23 lines1-6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to combine the monitoring error rate into the system of

Ekudden as taught by Perreault because such monitoring step would provide an error

correction upon an error condition that may degrade the quality of data to below certain

predetermined acceptance levels. This would have improved overall system capacity.

Regarding claims10 and 51, Ekudden does not explicitly teach monitoring an

error rate as claimed. However, Perreault teaches monitoring an error rate of

transmitting, and if the error rate of transmitting is higher than a threshold rate, setting

the replication flag (e.g., see col. 6 line 48-col.7 line 32 and col. 23 lines1-6). Therefore,

it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine the monitoring error rate into the system of Ekudden as

taught by Perreault because such monitoring step would provide an error correction

upon an error condition that may degrade the quality of data to below certain

predetermined acceptance levels. This would have improved overall system capacity.

Regarding claim 17, Ekudden does not explicitly teach monitoring an error rate

as claimed. However, Perreault teaches monitoring an error rate of transmitting, and if

the error rate of transmitting is higher than a threshold rate, setting the replication flag

(e.g., see col. 6 line 48-col.7 line 32 and col. 23 lines1-6). Therefore, it would have been

obvious to a person of ordinary skill in the art at the time the invention was made to

combine the monitoring error rate into the system of Ekudden as taught by Perreault

because such monitoring step would provide an error correction upon an error condition

that may degrade the quality of data to below certain predetermined acceptance levels.

This would have improved overall system capacity.

4.   Claims 9, 21-23, 28, 40-42, 50 and 60-62 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Ekudden in view of Tsunoda (US 6,516,435 B1).

Regarding claims 9, 28, 40, 50, and 60, Ekudden does not explicitly teach retransmitting device receiving a redundancy request; and in response to the redundancy request, setting the replication flag. However, Tsunoda teaches retransmitting device receiving a redundancy request, and in response to the redundancy request, setting the replication flag (e.g., see col. 24 lines 37-64 and col. 26 lines 22-49). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the redundant request in Ekudden as taught by Tsunoda because such redundant request would enable the lost packets to be retransmitted. Thus, reliability of the transmission would be guaranteed

Regarding claim 21, Ekudden does not explicitly teach retransmitting device receiving a redundancy request; and in response to the redundancy request, setting the replication flag. However, Tsunoda teaches retransmitting device receiving a redundancy request, and in response to the redundancy request, setting the replication flag (e.g., see col. 24 lines 37-64 and col. 26 lines 22-49). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the redundant request in Ekudden as taught by Tsunoda because such redundant request would enable the lost packets to be retransmitted. Thus, reliability of the transmission would be guaranteed

Regarding claims 22, 23, 41, 42, 61 and 62, Tsunoda teaches the redundancy request is issued from the first/second device (e.g., see col. 24 lines 53-64).

5.   Claims 11, 12, 18, 19, 31, 32, 37, 38, 52, 53, 58 and 59 are rejected under 35

U.S.C. 103(a) as being unpatentable over Ekudden in view of Dedrick (US 5,754,787).

Regarding claims 11, 31, 32, 37, 52 and 58, Ekudden does not explicitly teach

the first device transmits the original voice data through an associated first modem, and

wherein the method further comprises determining a surplus bandwidth capacity of the

first modem; and setting replication flag if the surplus bandwidth capacity is higher than

a threshold. However, Dedrick teaches the first device transmits the original voice data

through an associated first modem (e.g., see col. 12 lines 45-52), and wherein the

method further comprises determining a surplus bandwidth capacity of the first modem,

and setting replication flag if the surplus bandwidth capacity is higher than a threshold

(e.g., see col. 12 lines 38-44). Therefore, it would have been obvious to a person of

ordinary skill in the art at the time the invention was made to combine determining

surplus bandwidth capacity of the modem in Ekudden as taught by Dedrick because

such bandwidth capacity determination would ensure enough free bandwidth to provide

high quality transmission of data. This would have increased the value of existing

electronic distribution networks (Dedrick, col. 2 lines41-42).

Regarding claim 12, 38, 53 and 59, Ekudden teaches generating the redundant

data (e.g., see page 2 paragraph 13). Ekudden does not explicitly teach determined

surplus bandwidth capacity. However, Dedrick teaches the determined surplus

bandwidth capacity (e.g., see col. 12 lines 38-44). Therefore, it would have been

obvious to a person of ordinary skill in the art at the time the invention was made to

combine the determined surplus bandwidth capacity in f Ekudden as taught by Dedrick

because such the determined surplus bandwidth capacity would ensure enough free

bandwidth to provide high quality transmission of data. This would have increased the

value of existing electronic distribution networks (Dedrick, col. 2 lines41-42).

Regarding claim 18, Ekudden does not explicitly teach determining a surplus

network bandwidth for transmitting the redundant data, and setting the replication flag if

the surplus network bandwidth is higher than a threshold. However, Dedrick teaches,

determining a surplus network bandwidth for transmitting the redundant data, and

setting the replication flag if the surplus network bandwidth is higher than a threshold

(e.g., see col. 12 lines 38-44). Therefore, it would have been obvious to a person of

ordinary skill in the art at the time the invention was made to combine the determined

surplus network bandwidth in Ekudden as taught by Dedrick because such network

bandwidth determination would ensure enough free bandwidth to provide high quality

transmission of data. This would have increased the value of existing electronic

distribution networks (Dedrick, col. 2 lines41-42).

Regarding claim 19, Ekudden teaches generating the redundant data (e.g., see

page 2 paragraph 13). Ekudden does not explicitly teach determined surplus network

bandwidth. However, Dedrick teaches the determined surplus network bandwidth (e.g.,

see col. 12 lines 38-44). Therefore, it would have been obvious to a person of ordinary

skill in the art at the time the invention was made to combine the determined surplus

network bandwidth in Ekudden as taught by Dedrick because such the determined

surplus network bandwidth would ensure enough free bandwidth to provide high quality

transmission of data. This would have increased the value of existing electronic

distribution networks (Dedrick, col. 2 lines41-42).

6.   Claims 13, 20 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ekudden in view Dedrick (US 5,754,787) in further view of Sidhu et al (Sidhu) (US

6,366,959).

Regarding claims 13 and 39, Ekudden and Dedrick does not explicitly teach

inputting a size of a jitter buffer; and setting a redundancy for generating the redundant

data in accordance with the inputted jitter buffer size. However, Sidhu teaches inputting

a size of a jitter buffer; and setting a redundancy for generating the redundant data in

accordance with the inputted jitter buffer size (e.g., see col. 20 lines 22-44). Therefore, it

would have been obvious to a person of ordinary skill in the art at the time the invention

was made to combine the jitter buffer size in the combination of teachings of Ekudden

and Dedrick as taught by Sidhu because it was conventionally deployed in the art to

maximize the quality of data stream for each of particular real time data application.

Regarding claim 20, the combination of teachings of Ekudden and Dedrick does

not explicitly teach inputting a size of a jitter buffer; and setting a redundancy for

generating the redundant data in accordance with the inputted jitter buffer size.

However, Sidhu teaches inputting a size of a jitter buffer; and setting a redundancy for

generating the redundant data in accordance with the inputted jitter buffer size (e.g., see

col. 20 lines 22-44). Therefore, it would have been obvious to a person of ordinary skill

in the art at the time the invention was made to combine the jitter buffer size in the

combination of teachings of Ekudden and Dedrick as taught by Sidhu because it was conventionally deployed in the art to maximize the quality of data stream for each of particular real time data application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh L. Duong whose telephone number is (703) 305-0295. The examiner can normally be reached on Monday- Friday, 8:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

O.D
November 24, 2003

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER